IN THE UNITED STATES PATENT AND TRADEWARK OFFICE

JUH O 5 ZOUG

In ro U.S. Patent Application

TAKESHITA et al.

Application Number: 10/812.896

Filed: March 31, 2004

For Apparatus for Microinfection of Sample.

2000 AMPHIMIAN OCCYTES

Attorney Docket No. HIRA.0147

Commissioner of Patents P.O. Box 1450 Alexandria, VA 22212-1450 Art Valt (632

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DECLARATION OF ONE SEVELED IN THE ART UNDER ST.C.P.R.\$1.132

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L Jun DTDMD, on a co-bavanter of the above identified application, and bereity doctors as follows:

I have exvioued the above-activemed patent application and carefully considered the Examiner's rejection besed upon US Patent No. 5,653,938 to Brown (horoinater "Brown"). It is my conclusion that the invention achieved the "unexpected results" of at least providing high and uniform expression efficiency as discussed as follows, which were not intended, tought, or suggested by Brown. Specifically, it is my opinion that someone of skill in the art would not be motivated to inject mRNA into a plurality of cocytes at "an identical depth" from a surface of each of the occurs in view of Brown.

The feature of the present invention is a plurality of simplifian occytes into which a sample introducing mRNA is injected at an identical depth in the range of 0.02-0.1 mm.

As shown in the reference Fig. I, the accepted layer been injected a sample including DNA at the identical depth in the range of 0.00-0.5 mm to have a high expression efficiency which is methal for our coning (p. 9, lines 24-27; p.15, lines 7-10 of the specification). In particular, Applicants discovered that the depth of 0.2 mm is the mentaum injection depth at which one can obtain a higher change in the pein expression rate (~905). See attached reference Fig. 1.

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